

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

### (19) World Intellectual Property Organization International Bureau

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## (43) International Publication Date 14 December 2000 (14.12.2000)

PCT

## (10) International Publication Number WO 00/76089 A1

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(81) Designated States (national): AU, BR, CA, CN, ID, IN,

(84) Designated States (regional): European patent (AT, BE,

CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,

(51) International Patent Classification7: H04L 12/56

H04B 7/26.

(21) International Application Number: PCT/GB00/00935

(22) International Filing Date: 14 March 2000 (14.03.2000)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 99304486.6

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9 June 1999 (09.06.1999)

Published:

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With international search report.

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(54) Title: TIME-SLOT PARTITIONING IN A TDMA SYSTEM

USER 1 **USER 2** SPEECH BLOCK #N SPEECH BLOCK #K 160 SAMPLES 160 SAMPLES = 20 MSEC = 20 MSEC 400~ ₹~402 **ENCODED ENCODED** SPEECH #N SPEECH #K 260 BITS = 20 MSEC 408~~ ~410 DATA BLOCK #N DATA BLOCK #K 456 BITS = 20 MSEC

(57) Abstract: According to the present invention there is provided a method of transmitting user data in a TDMA system in which the number of channels is increased by partitioning at least one time-slot in a TDMA frame into at least two sub-time-slots. Each sub time-slot may be allocated to a different user. User data may be transmitted in each time slot in a burst structure, user data being transmitted in each sub time-slot in a corresponding burst structure. User data may be transmitted in each time slot in a burst structure having n bits and wherein each time slot is partitioned into m sub time slots, user data being transmitted in each sub time-slot in a corresponding burst structure having n/m bits.

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